AMENDMENTS TO THE CLAIMS

Please amend the claims as indicated:

1. **(Currently amended)** A solution injection system comprising:

a mechanical syringe driving mechanism having a barrel holder with a flange insert groove and an arcuate guide groove formed on a front side wall surface of the flange insert groove; and

a syringe having a syringe barrel comprising

a barrel having a body configured to be received within said barrel holder and having a first end and a dispensing end opposite the first end,

a flange extending outwardly from the barrel body proximate said first end and having an arcuate guide projection extending outwardly from a front surface of the flange towards the dispensing end, ~~and~~

a press projection formed on the rear surface of the flange,

a tip of the press projection being capable of being compressed to press the flange against a front sidewall surface of a flange insert groove when the flange is inserted into the flange insert groove formed in a cylinder holder and is fitted in a use position,

wherein the arcuate guide projection is configured to engage with the guide groove of the barrel holder when the syringe barrel is inserted into the barrel holder, and

wherein the press projection has a narrower width toward the tip, whereby the press projection is capable of being more deformed by being pressed.

2. **(Canceled)**

3. **(Original)** A system according to Claim 1, wherein the guide projection comprises two sections.

4. **(Canceled)**

5. **(Original)** A system according to Claim 1, wherein the flange has two flange cut parts symmetrically positioned in the flange opposite to each other.

6. **(Original)** A system according to Claim 5, wherein an even number of the arcuate guide projections are provided so that each half number is positioned symmetrically to each other on the flange where the two flange cut parts are not provided.

7. **(Original)** A system according to Claim 6, wherein the guide projections are arcuate in shape.

8. **(Canceled)**

9. **(Currently Amended)** A system according to Claim 1, wherein the arcuate guide projection comprises a plurality of guide projections aligned in a line in the circumferential direction on a front surface of the flange.

10. **(Original)** A system according to Claim 9, wherein the flange has two flange cut portions symmetrically positioned in the rim of the flange opposite to each other.

11. **(Original)** A system according to Claim 10, wherein an even number of the guide projections in the form of truncated cones are provided so that each half number is positioned symmetrically to each other on the flange where the two flange cut portions are not provided.

12. **(Currently amended)** ~~A system according to claim 1,~~ A solution injection system comprising:

a mechanical syringe driving mechanism having a barrel holder with a flange insert groove and an arcuate guide groove formed on a front side wall surface of the flange insert groove; and

a syringe having a syringe barrel comprising

a barrel having a body configured to be received within said barrel holder and having a first end and a dispensing end opposite the first end,

a flange extending outwardly from the barrel body proximate said first end and having an arcuate guide projection extending outwardly from a front surface of the flange towards the dispensing end,

wherein the arcuate guide projection is configured to engage with the guide groove of the barrel holder when the syringe barrel is inserted into the barrel holder, and

wherein the syringe is pre-filled with a chemical solution.

13. **(New)** A system according to Claim 12, further comprising:

a press projection formed on the rear surface of the flange; a tip of the press projection being capable of being compressed to press the flange against a front sidewall surface of a flange insert groove when the flange is inserted into the flange insert groove formed in a cylinder holder and is fitted in a use position.

14. **(New)** A system according to Claim 12, wherein the guide projection comprises two sections.

15. **(New)** A system according to Claim 14, further comprising:

a press projection formed on the rear surface of the flange; a tip of the press projection being capable of being compressed to press the flange against a front sidewall surface of a flange insert groove when the flange is inserted into the flange insert groove formed in a cylinder holder and is fitted in a use position.

16. **(New)** A system according to Claim 12, wherein the flange has two flange cut parts symmetrically positioned in the flange opposite to each other.

17. **(New)** A system according to Claim 16, wherein an even number of the arcuate guide projections are provided so that each half number is positioned symmetrically to each other on the flange where the two flange cut parts are not provided.

18. **(New)** A system according to Claim 17, wherein the guide projections are arcuate in shape.

19. **(New)** A system according to Claim 13, wherein the press projection has a narrower width toward the tip, whereby the press projection is capable of being more deformed by being pressed.

20. **(New)** A system according to Claim 12, wherein the arcuate guide projection comprises a plurality of guide projections aligned in a line in the circumferential direction on a front surface of the flange.

21. **(New)** A system according to Claim 20, wherein the flange has two flange cut portions symmetrically positioned in the rim of the flange opposite to each other.

22. **(New)** A system according to Claim 21, wherein an even number of the guide projections in the form of truncated cones are provided so that each half number is positioned symmetrically to each other on the flange where the two flange cut portions are not provided.